

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: 100V On the Air Again!
Message-ID: <199612161913.NAA12545@lesol1.dseg.ti.com>

Greetings,

Finally got back to the 100V this weekend after a hiatus of several weeks for holiday stuff. Folks following this thread may remember that this old 100V quit completely before Thanksgiving, just as it was going back together after being thoroughly overhauled. I'd put off working on it again until I had time for serious troubleshooting, but it turned out that the only thing wrong was a bad contact on the tube socket of the crystal oscillator.

Before putting the 100V on the air, I spent a little time troubleshooting "hum" in the audio which was only about 30 dB down and which interfered with trying to get an accurate indication of alternate sideband suppression. It was soon obvious that the hum was not being introduced via supply voltages but rather as a result of pickup. There was nothing obviously wrong in the wiring, nor were there any ground loops, so I decided to put the 100V on the air anyway.

Reports received were extremely complimentary. No one commented on the hum, although I asked several times specifically about it. Of special interest was a contact on 7290 (or thereabouts) with Lou, W5BM (at least I think that was his call). Lou was also using a 100V! Naturally, his 100V sounded pretty good, too. We talked about what we'd done to get our 100V's up and running. Not surprisingly, we'd both done a lot of the same things to get them operational. Lou had also noticed "hum" in his 100V and to alleviate it had taken the rather drastic measure of running the filaments of the low-level audio tubes from DC.

Has anyone else noticed "hum" in their 100V's? No one on the list commented about this previously.

My on-air contacts were made using a low-output hand-held microphone which had the necessary plug installed on it. Later I tried using my Astatic 10D mic which provided higher output. This meant a little less hum since I could turn the mic gain down somewhat.

I've still got a couple of hours of knob and cabinet cleaning to do, but am quite pleased with the 100V's performance so far. I suppose I'll even calibrate the VFO before I button it up. BTW, I put the 100V on AM very briefly so I got a feel for that, although band conditions didn't favor continuing to use it on AM at the time.

I hope to hear comments from other owners about "hum" in their 100V's and

what, if anything, they did about it.

Regards,
Bill Sorsby, N5BU

bill.sorsby@dlep1.itg.ti.com
Views expressed herein are no one's fault but mine.

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Karl-Arne =?ISO-8859-1?Q?Markstr=F6m_08?= 6017171
Subject: Re: 4CX-250 Tubes
Message-ID: <A58IPT2TB0B*/R=A1/R=MRGST/U=KAM/@MHS.stoa.mobitel.telia.se>

Bill WA4VAF wrote:

How can I tell if the tubes are good? I can't find a tube
^base diagram, so not sure which pins are the filaments. I would like to
^sell them as pulls if they check okay.
a
^Sure have learned alot here. Thanks for the help.
a

4CX250B basing viewed from bottom with index key straight down and going
clockwise:

Pin 1 Screen (DC connection)
Pin 2 Cathode
Pin 3 Filament 6.0 V at 2.6 A
Pin 4 Cathode
Pin 5 N/C , do not connect
Pin 6 Cathode
Pin 7 Filament
Pin 8 Cathode

Center pin is control grid (DC and RF connection)
Collar below anode cooler is also screen (RF connection)

Field testing of tubes of this category is difficult at best.

Old pulls often have reduced transconductance and emission as the reason for
retiring,
which shows up on a suitable tester. Transconductance in a new tube should
be about 12 mA/V (or mmho's) measured at $V_a=500$ V, $V_{g2}=250$ V and $I_a = 200$ mA

(this is 100 W plate dissipation,so be fast in measuring!)

The problem is to find a transconductance tube tester that can provide transmitting tubes of this category with the proper operating potentials. I have only seen and used one, the British AVO Valve Characteristic Bridge of 1960's vintage.

(Used a lot back in my University Radio Club days when testing and sorting boxes full of used 4CX250's to find a pair that would run stable in the K2RIW 432 MHz Moonbounce PA at SK6AB)

Another method is to test in a working circuit, which has the advantage of having the required voltages present from start. A major problem is then if the tube is somewhat soft, as runaway conditions easily can develop, which could blow the cathode resistors if present, or create a flash-over that damages the tube. Good advice is to run up voltages slowly.

Hope this helps,

73/Karl-Arne Markstrom
SM0AOM

kam@stoa.mobitel.telia.se

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: RIlowite@aol.com
Subject: Re: 4CX-250 Tubes - testing resource
Message-ID: <961216141214_1456030638@emout04.mail.aol.com>

Dear Boatanchorites: A fellow I know is in the industrial tube testing business here in Bergen County NJ. His name is John Fikus and his address is 168 Chestnut St. Nutley, NJ 07110. His Tel: 201-661-0410 . He Retired from the Federal Radio Labs some years ago and started the tube testing business shortly thereafter. He is an expert in evaluating any tube you can imagine, from the smallest peanut type to the largest BC transmitter types, as well as maggies and other old WW2 types. He never bothered with Ham Radio but is very well versed in electronics. He is now 80 yrs old (Near my age) and when I spoke to him about adding him to the list he was a little concerned about getting too busy, but agreed that I could let the list know of him. Soo,, there he is if you need his services. I have used his services in the past with very satisfactory result, and his prices are quite reasonable. Incidentally, his tests are the gold standard for many users all

over the world, as his accuracy and integrity are of the highest. Other than the fact that he is a dear old friend and trusted asset, I have absolutely no pecuniary interest in his business. .

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: k9gdt@juno.com (George P Sieverson)
Subject: Re: 75A4 AM filter ala Digi Key - *** Danger Will Robinson!!! ***
Message-ID: <19961216.183753.10854.3.K9GDT@juno.com>

Greetings Lionel, Mike and fellow glassaholics,

>From the "Danger, Will Robinson!" department:

Last spring, I acquired a 75A-4 which came with stock Collins 500Hz and 3.1Khz mechanical filters. There was also an AM ceramic filter included as a freebie. It was wired to a 9 pin plug in accordance with the ER article. There is one aspect of that modification which should be mentioned here, especially if implementing it on another radio.

A mechanical filter is four terminal device. (OK, OK! Five if you include the case ground.) The ceramic filter is a three terminal device. The AM filter/plug assembly supplied with my A4 had pins 1 and 6 tied together. So what, you ask?

The effect on my A4 (s/n 4301) was to deprive V6 of it's AVC control voltage by shorting it to ground. There were no smoke or flames, just an "AVC challenged" IF amplifier, V6. This caused the S-meter to read higher and made the AVC loop less "tight". This effect existed as long as that ceramic filter was plugged in, no matter which of the three filters was being used.

I wish I had discovered this in the beginning. I could have saved myself a whole lot of time when modernizing the receiver's AVC system.

I understand some of the older 75A-4s had B+ on the filter's input terminals. Plugging in this ceramic AM filter could be a real adventure on those units.

One last comment about DigiKey: These folks always ship my measly small orders in a timely and efficient manner. They're real pleasure to do business with.

Just my \$0.02 worth.

Happy Holidays to all!

-George

George Sieverson
Barrington, IL
K9GDT@JUNO.COM

On Sun, 15 Dec 1996 09:42:13 -0600 (CST) "L. Booth" <lbooth@comm.net>
writes:

>This would probably also work in the 75S series receivers. My S3 uses
>the 455Kc IF xfmr's for AM, unless you put in the optional filter,
>which
>is VERY expensive, if you can find one. I will try this approach with
>my S3 and see what happens with matching and such and the physical
>instalation. Has anyone ever done this before?
>
>Lionel N5LB

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: "F r6fqHo!ht" <75121.100@CompuServe.COM>
Subject: : Re: Origin of Digi-Key Electronics
Message-ID: <961216174727_75121.100_IHV66-1@CompuServe.COM>

To All!

<<Weren't the famous Dow-Key relays manufactured in Thief River Falls, Minn ?
<

I have a Dow-key relay that has on it "Made in Thief River Falls" so
there must be a connection. Wonder which came first? Dow Key now is in
California.

Regards from Hawaii,
Raymond J. Cote

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: "D.D. Todd" <dube3@n-link.com>
Subject: Re: Airbone SSB
Message-ID: <32B4FB2B.7750@n-link.com>

John Kolb wrote:

> The story goes that during one of the exercises back in the late 70's,
> that someone messed up one of the test msgs and left off the "this is
> a drill" part, so the people making up the coded msgs thought we were
> really being attacked. I heard that all of a sudden that the voices

> were no longer the calm, cool, bored sound "Sky King, Sky King, this is
> .." but rather frantic sounding.

It's fiction, as far as I know. I was in SAC from 1957 until 1975 and I
most likely would have heard of such a broadcast, but I didn't.

> CQ magazine once did a conversion article on the Collins radio from
> the B-52's, which was in a cannister shape, and run completely by
> remote control, but never saw any of the radios offered for sale
> after that. If the radios were only for the B-52's guess there weren't
> ever enough to make much of a splash in the surplus market.

It's lack of popularity probably had more to do with the
115-volt/400-cycle AC and 24-volt DC power requirement.

--

73,

Dube Todd

K4DWW

dube3@n-link.com

Tell yourself NO now and then; it's good for you.

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996

From: "D.D. Todd" <dube3@n-link.com>

Subject: Re: Airborne SSB

Message-ID: <32B4FC6D.D42@n-link.com>

Ray L. Mote wrote:

>

> SAC Giant Talk (Air/Ground) Net:

>

> Site	Station	Airborne CP
> Offutt AFB, NE (HQ SAC)	MIGRATE	LOOKING GLASS
> Barksdale AFB, LA (HQ 2nd AF)	RETAIL	ACHIEVE
> Westover AFB, MA (HQ 8th AF)	OUTWEIGH	GRAYSON
> March AFB, CA (HQ 15th AF)	DEMOCRAT	STEPMOTHER
> Joint Chiefs of Staff	DISCORD	
> All SAC aircraft	SKYKING	
> All SAC ground stations	SKYBIRD	

>

> SAC Point-to-Point Net:

>

> Offutt AFB, NE (HQ SAC)	PARKWAY
> Barksdale AFB, LA (HQ 2nd AF)	PAYROLL
> Westover AFB, MA (HQ 8th AF)	POKERFACE
> March AFB, CA (HQ 15th AF)	CAPSULE

> Torrejon AB, Spain (HQ 16th AF) CIVILIAN
 > Ramey AFB, P.R. (gateway stn) FORTYNINER
 > Goose Bay, Labrador (8th AF net) GIBSON
 > Hickam AFB, HI FATIMA
 > Kadena AB, Okinawa DEMIJOHN
 > Anderson AB, Guam (gateway stn) PORT WINE
 > Net call (all stations) BRAGGART
 >
 > Ramey and Goose Bay acted as relay or "gateway" stations between CONUS
 > and Europe; Anderson acted as relay for the Pacific.
 >
 > 73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

And to the Airborne Command Post list, add Silver Dollar, the Washington,
 DC support.

--
 Dube Todd K4DWW dube3@n-link.com

Tell yourself NO now and then; it's good for you.

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
 From: Ho4bart@aol.com
 Subject: Anyone tried to tally HRO variants?
 Message-ID: <961216045150_841099355@emout08.mail.aol.com>

just wonder if anyone has attempted anything like this.
 i don't know much about the civilian US versions, but in one quick pass i
 would tally
 2 WW2 german models
 3 or 4 japanese "versions" if you include the 3/4 size models
 1 e german (former DDR)
 2 or 3 australian? (AMR101 + 2 Kingsley civilian models)
 2 USN RAS and R?? motor driven scan tuning
 1 UK R-106 (only US manufacture, however??)
 ? new zealand? 1 model?
 1 Washington State (hi) : i only know about this as i own it: Northern
 Radio
 (seattle) model S-20 relabeled HRO, built for some AK cannery contract, with
 single
 coil
 0 USSR models (i inquired !)
 did i top anyone's previous ballpark count?
 rsgb's Technical Topics called the Japanese model a mechanical masterpiece --
 obviously he never saw one --usual flimsy construction and the PW dial was
 obviously too much of a challenge for them to copy.
 hue miller

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Conard Murray <ws4s@InfoAve.Net>
Subject: Anyone working on an ARB?
Message-ID: <2.2.32.19961216142644.006c83f4@infoave.net>

Hi,
I found a neat boxed 12A6 that has a label specifying that it is a spare for an ARB ... If you are working on completing an ARB, this is just the item for you!
I either need to get this to you or get an ARB myself to go with it! Either way is fine with me.
73 and Happy Holidays,
de Conard ws4s

```
.....  
. Conard Murray WS4S Glowbugs listowner .  
. 217 Dyer Avenue ws4s@infoave.net .  
. Cookeville, TN 38501 615-526-4093 .  
. <>< Wise men still seek Him <>< .  
.....
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From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Engbert Oord <engbert.oord@jet.uk>
Subject: Re: AR-88 - I'm sold...
Message-ID: <9612160818.AA02533@jet.uk>

At 11:34 AM 13/12/96 -0600, you wrote:
>

> The case has been repainted and will have to be stripped and recoated.
>The previous owner has one other AR-88 and it has a very professional black
>wrinkle finish

Welcome to the club.
Yes black wrinkle is the original finish. I have an AR88D in similar shape as yours. Black wrinkle all around including the front panel with engraved lettering,
the two horizontal bars are chrome. My second example, an AR88LF has the same black wrinkle finish with exception of the front panel which is plain smooth silk black, with the two horizontal bars painted gray. The lettering is silk screened. This seems to be original as well. I can only agree with you, this is a very nice receiver.

Greetings

Engbert Oord , G7THB
JET Joint European Torus, Culham ,UK
Email : eo@jet.uk or engbert.oord@jet.uk

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Norm Flasch <flasch@cushy.ece.nwu.edu>
Subject: ARCI meet
Message-ID: <199612162059.0AA23981@cushy.ece.nwu.edu>

Did anyone attend the ARCI meet in Elgin yesterday?
Any reports?

--
Norm Flasch flasch@ece.nwu.edu Northwestern University
 Electrical and Computer Engineering

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: mack@mails.imed.com
Subject: Attn: Dallas and Oklahoma folks
Message-ID: <9611168507.AA850765233@mails.imed.com>

I made a trip up to Stroud, OK (between Oklahoma City and Tulsa) on Saturday to get some of the 3.8 GHz microwave stuff there. The microwave guys in Dallas bailed out on me so there were no trucks or trailers there to haul away this stash.

There is still some stuff there if any of y'all are interested. It is pick up only. This was a parts depot for a Western Union string of sites. The things that are there that might be of interest to this group are about 10 racks each 7 ft tall. There are about 20 regulated power supplies. Some are 150V at about 500 mA and the others are 300V at about 300 mA. They have some really nice panel meters. There are also a few 750V klystron power supplies. These have 2 UTC round power transformers. The big one is rated at 950 V each side of CT at 360 mA CCS. From the weight of these I'd guess they are good for 1KVA to maybe 1.5KVA in ICAS service. I can get part numbers off the one at home if there is interest. At least one model of P/S has a filament transformer rated at 6.3 VAC @ 20 A.

There are receivers, modulators, and transmitter bits that contain things like 5763 tubes, a whole bunch of 6XXX type numbers, a klystron or 2, a few cavities for 2 KMc and 4 KMc, 3 8-ft dishes, some 70's vintage sand state ancillary equipment (MUX stuff) and power

supplies.

I can put you in touch with Martin or Leon if you are interested. This stuff needs to get cleared out to make room for new stuff. If it isn't gone probably in the next month or so, it will go to the landfill. Martin, Leon, and I are all incurable pack rats so it pains us to see this stuff die such a death.

In case you hadn't noticed this stuff is all free for the taking! Only cost is the gas to get there and back.

Ray Mack
WD5IFS
mack@mails.imed.com
Friendswood (Houston), TX

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: aculbert@pps1-po.phyp.uiowa.edu
Subject: RE: BA FEST
Message-ID: <199612161812.MAA25374@ns-mx.uiowa.edu>

As for a BA Fest, would the group want to consider Cedar Rapids, Iowa the first weekend in August?

The Collins Collector's Assn. has scheduled their annual shindig to coincide with the Cedar Valley ARC's annual hamfest. The new hamfest location at the Amana Colonies Convention center offers about 50 acres of parking and is only a few miles off I-80.

On site camping facility and nationally acclaimed restaurants in the various Amana Colony villages.

Is an opportunity to visit the "Holy grail" of BAs and see the "antenna farm" at Rockwell-Collins.

Al, K0AL

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Ben Bradley <bradley@norcross.mcs.slb.com>
Subject: re: BA fest...hamfests in general
Message-ID: <2.2.32.19961216034321.00328abc@norcross.mcs.slb.com>

>Date: Sat, 14 Dec 1996 15:27:28 -0800

>From: pmills@A.crl.com (Phil Mills)
>To: boatanchors@theporch.com
>Subject: BA fest...hamfests in general
>Message-ID: <199612142327.AA10326@A.crl.com>

>

>This brings up something else.....

>

>I think that we need to do more to spread the word about hamfests and
>weekend tailgate sessions. I for one have only been to ham fests in the
>Texas area plus a couple in Florida when I was travelling on business.
>For a sizeable meet coinciding with a BA meet, I would be willing to do
>some serious driving.

Probably me too - I might go to Gaithersburg next summer, while I'd consider Toronto too far from Atlanta, unless I could arrange for another good reason to also be in the area. For a general hamfest, I'll consider going to anything that's within a two-hour or so drive. I've been to about four this year, hearing about them 'here and there'.

>In short, if something is going on in your area, put the word out!

ARRL's website has a pretty good list of hamfests at <http://www.arrl.org/hamfests.html> - but it's not complete, as I have a flyer for a January hamfest in South Carolina, and it's not on ARRL's list:

GARS - Greenwood, SC Hamfest

Greenwood Civic Center/Hwy 72 East/Saturday, January 11, 1997

That's the basic info, but now I'm reading on and thinking...

[More pertinent details from the flyer]:

"Doors will be open to DEALERS AND FLEA MARKETERS for set-up at 6:00 AM
Doors will be open to the GENERAL PUBLIC at 9:00 AM"

Advance Tickets \$5.00

At The Door \$5.00

Tables \$10.00

Tailgate \$2.00 plus ticket (weather permitting)

Table price same for dealers and flea marketers. NO REFUNDS on table reservations after JAN 01, 1997,

Send advance ticket order and table reservations to:

Allen Hennemore [KD4RKG] 106 Dorchester St, Greenwood, SC 29646

Phone: (864) 223-6188 OR (864) 227-3500

For further information contact:

Dewey Willis [KD4AZC] 605 Pelzer St., Greenwood, SC 29646 (864) 229-3755

Frank Kohlar [WA9FW0] 104 Rock Creek Dr., Greenwood, SC 29649 (864) 229-5639

(what's not clear to me is when table reservations have to be in. I suppose it's on a first-come first-served basis, and no fixed deadline...)

The reasoning behind the details:

Now, I know from what I've seen before that some (okay, most) of the best

deals will be gone by 9AM. I have a few sandboxes that say 'Personal Computer AT' that I've heard referred to here as 'PC debris' that I could take up there and sell for \$30 or \$10 or 'make offer' (actually, I want to keep a couple of the cases - they could make for stylish hambrew rigs), set up a table at 6AM (maybe even dig up some ham-related stuff to sell), so that I can legitimately be there well before 9AM, and maybe even make back the table fee in what I sell.

This happened to me at Athens/Watkinsville a month or two ago: I got there at 7AM while they were setting up the ticket table outside the door, I bought my ticket, went in and checked out what had been set up so far, saw an HR-10 that I would have talked myself into had someone else not been so fast (I'll talk faster next time), went out to see the tailgaters, came back to the door about 8:40 and was asked if I had a table inside or was helping someone set up. I said no, why? Well, they weren't letting the general public in until 9:00 AM. I had to hang out in the foyer, or go back to see if there were any new tailgaters until 9AM came along. Later I found the flyer for that hamfest (which I had lost the day I had gone up there) and it indeed said entrance to the general public at 9AM. I just want to prevent this kind of thing from happening again....

Does anyone do this, carry some junk to sell and rent table space, with as much or more motivation to 'get in early' as to selling your junk?

And apologies if this has tended to become general hamfest talk and not necessarily BA-related. My excuse is that hamfests tend to be the most common places to trade BA's...

Someone else said:

>Date: Sun, 15 Dec 1996 13:22:34 EST

>From: km1h@juno.com

>Those who are trying to organize a conference may wish to consider a
>roving affair. It may give many an opportunity to sample something new
>each year. This may have been mentioned earlier but I was too busy with
>the Delete Key while playing catch-up on the mail....sorry if I've
>duplicated an earlier effort.

>

>73.....Carl

I like this idea, too - those of us who choose not to cross the continent to go to hamfests will at least have a BA-con nearby every few years.

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: Tom Norris <badger@telalink.net>

Subject: BA Santa Comes To Nashville

Message-ID: <3.0.1.32.19961216204207.006af004@telalink.net>

I came home today and found two large boxes
on my doorstep, deposited by UPS.

First box --- My R-274A/FRR, SP-600!!!! Decent shape,
needs a good cleaning, and a recapping first thing
before any power is put to it.

Second box -- A TV-7A/U in decent shape, only needing
a coat of paint (and maybe the looseleaf rings in the cover)
Works great! been looking for a good tube tester since a
month or so after I gave my I-177 away several years ago.
Started testing my box of pulls right away, and still in the
process as I write this....

And the boxes were just shipped Thursday from New Mexico.

More on the adventures of the Military Hammar when I get
around to starting on the project, probably not until after
Christmas, unless I just can't STAND to see it sitting there
all dark and unpowered, pitiful and alone, begging to gotten
at with the soldering iron.....

Even better News! The accident I had last month on my way back
from WA5BBS to get the R-390A is finally settled, the check arrived
today from the trucking company's insurance provider. Can now get
the battle scars repaired on my car. Amazing, none of the BA's in the
back were hurt in the least. If only my Ford Escort was built like my
R-390A!!!!

Happy Holidays All!!!

Tom Norris KA4RKT
badger@telalink.net Nashville, Tennessee, USA

Eagles may soar free and proud, but weasels
never get sucked into jet engines.

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Walt Novinger <waltn@earthlink.net>
Subject: Re: BA Sightings @ Antique Radio Swapmeet (Chicago]
Message-ID: <2.2.32.19961216172339.006aaefc@mail.earthlink.net>

At 07:35 PM 12/15/96 -0600, liahona@execpc.com wrote:

>A Knight Kit R-100 for \$160!!! The exclamation points indicate my
>belief that only someone trying real hard to reconstruct their novice
>station would pay that for what I remember to be a very underwhelming
>receiver. But then again so was the RME-45 which was my first and when
>I found mine a few years ago at a hamfest I told the seller I'd take it.
>

Actually, I find the -45 to be a rather nice receiver. Of all my BAs from that vintage, it has the most linear and accurate dial calibration. I enjoy being able to eyeball, say, 6165 and have R Netherland be there when the toobz warm up. The receiver does drift a bit, and its BFO injection is a bit weak for serious SSB work, but all in all I find it a pleasant receiver to use,. I just wish they ahd borrowed a trick from Zenith (and others) and included a motor drive to quickly slew from one end of the bands to the other!

Walt

=====

Walt Novinger	Real Radios Keep You Warm At Night!
Collector of hollowstate communications receivers and test equipment	
waltn@earthlink.net	wnovinger@shl.com CI\$: 73340,2015

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Walt Novinger <waltn@earthlink.net>
Subject: Cryatals needed
Message-ID: <2.2.32.19961216172340.006b74a8@mail.earthlink.net>

Fellow BAers...

I am trying to locate a pair of crystals to be used in adding a product detector to my R-390A. They need to be 456.350 and 453.650 kHz. I understand these are standard Collins parts. Can anyone help me either with the crystals or with a source?

Thanks,

Walt

=====

Walt Novinger	Real Radios Keep You Warm At Night!
Collector of hollowstate communications receivers and test equipment	

waltn@earthlink.net

wnovinger@shl.com

CI\$: 73340,2015

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: "Sandy Blaize, W5TVW" <ebjr@worldnet.att.net>

Subject: Re: Do You Have Any Lysco

Message-ID: <19961217015948.AAA24814@LOCALNAME>

At 12:36 AM 12/17/96 +0000, you wrote:

>Hi Sandy - Do you any of the Lysco single band rigs in your collection
>and are any of them looking for new homes if so. Also, do you have any
>data sheets of poly-pedience modulations made by Stancor. I have a
>60-watt job but no idea how to connect it to match various tubes. Thanks,
>Bob

No. (to both questions)

I DID have a little Lysco mobile transmitter for 10 meters back in 1953! The one with three 6AQ5 tubes. It was a miserable little TVI maker, but it was cheap and it worked. It's been long gone years, and years ago.

The data sheet on the modulation transformer is like the one on the Universal output transformer! They never published the hookup in the catalog, just on the sheet that came with the transformer. I'd suggest hooking up a AC voltage source to the primary (10-25 volts) and see what the other side delivers across the combinations of taps. You should be then able to calculate the 'ratio' then convert it to impedances.

I have the formulas somewhere if you don't. Someone here gave a dissertation on doing that. Maybe they still have it and can post it.

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive,

Metairie, LA., 70001

ebjr@worldnet.att.net

Looking for: ELMAC PMR-7/PMR-12, Hallicrafters SR-75, 860 tubes

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: "Dave Kelley" <aa7tq@primenet.com>

Subject: Drake calibrator fixed - here's how

Message-ID: <199612170100.SAA15416@primenet.com>

I posted a problem yesterday that the calibrator on my Drake 4B was bad. I was answered by 3 guys...one with the same problem, one offering rare parts if I needed them and another with common problems and what to look for on these units. I can safely say, I doubt I would have the guts to dive into this part of the hobby without knowing so much great help was available so

fast. I thought I'd post the solution to help others who may have the problem.

The calibrator is a simple oscillator at 100kc that feeds into a pair of 923 ICs for dividing it for 25kc output. These can be jumpered to do every 50kc or take both out for only 100kc points.

My problem was that as soon as I turned on the rig it would weakly work on the 100kc points and quickly turn raspy and fade away...eventually not being heard at all.

I thought it may be one of the ICs so I did the jumpers to take them out of the loop. Behold, I had a weak raspy signal on the 100kc points...but it held and didn't fade away. This makes you go "hmmmmmm".

Sounded like a bad supply of power. Dirty enough that the ICs wouldn't work and made the tone raspy. That should point anyone in the right direction.

With a comment from John King, WA1ABI, stating that a common problem was the filter cap from the power supply that fed this area, I pulled one end of C192, a 1000uf 15 volt cap and clip leaded a new one in place.

BINGO! Strong and high quality tone burst forth from my speaker! So, I wired it in and replaced the jumpers for 25kc points. Works like a champ.

I want to thank John WA1ABI, Mike W6MXV, and RF Buchanan KF4FJH for answering my call for help on the Drake R4B calibrator problem. This list always comes through with an answer. (or any gear you need too!)

73 and Happy Holidays to you all!

Dave, AI7R
<http://www.tempe.gov/radio>

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: "David L. Thompson" <thompson@mindspring.com>
Subject: Re: Eldico Harmonic chaser
Message-ID: <199612160459.EAA115542@mule0.mindspring.com>

Larry Godek W00GH wrote:

>Dave, K4JRB's posting about the 1950 CQ mag and all the Eldico
>stuff brought back thoughts of something I have out in the garage.
>
>NIB, NOS Eldico Harmonic Chaser, complete with directions all
>rolled up in its original can.
>

>I've taken it to several hamfests and only had one or two people
>even know what it was for. Most of them looked at it and (it
>doesn't look like Yaesucomwood stuff) never even commented on it.
>
>A few ol' timers knew what it was and had even owned one. But to
>have seen one still in the box was another matter.
>
>I think there was a slight smell of "Old Stale" 1950's air in the
>can when I opened it. Much cleaner stuff than what we have today.
>
>

Larry and interested BAers...

The harmonic chaser is at the top of page 41 of the Harvey ad in the April 1950 CQ. This was a absorptopn type wavemeter designed to cure fundamental overload on "all" 13 TV channels. Note the all from 1950. The wavemeter found the harmonic then you had to figure out a way to cure it! The wavemeter could be used with volt-ohmmeters or with the matching 500 microamp meter. The harmonic chaser (model TVH) was \$4.98 kit and \$9.98 wired. The meter and matching case was \$6.50.

73, Dave K4JRB

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: TPHAAK@ccmail.monsanto.com
Subject: RE:FAA Modulator
Message-ID: <00304000020727360000002*@MHS>

Skip,

I have a FAA modulator that uses a pair of 4-125A tubes and has its own internal supply. Big heavy dude for sure.

I don't know the model number of it but I do have the schematic for it. If you or anyone else is interested I'll check on the model and or make copies of the schematic.

Tim WA0TSY
tphaak@monsanto.com

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Terry Burge <terrybu@netman.ENS.TEK.COM>
Subject: from r.r.s.
Message-ID: <9612162123.AA14398@netman.ENS.TEK.COM>

Gang,

From rec.radio.swap FWIW:

>From: Tom & Daniela Farrington <tdfarrin@adnc.com>
>Subject: FS/T: National NC-183
>Date: Sun, 15 Dec 1996 16:19:34 -0800
>Organization: adnc.com

>For Sale or Trade--National NC-183. Overall very good condition, needs
>power cord. Seems to be complete. All knobs, etc. intact. Best offer.

>Thanks,
>Tom

Don't email me, email Tom.
Terry

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Dave Metz <metzd@cfw.com>
Subject: FS :TRANSMITTER TUBES
Message-ID: <2.2.32.19961216035753.007464bc@milo.cfw.com>

I have this NIB 710L/7518 GE tube and without a ticket, have little use
other than display! For some reason AES lists the 710L with the secondary
number of 7509A. I am clueless why my tube doesn't say 7518, but that's what
the box says--7518.

I also have a pair of NIB Sylvania 6476A's.

If interested, please make me an offer shipped ups.

Thanks,

dave

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: BRIDGERS@gonzo.ccl.org
Subject: FS: R-390A Meters, Covers, and etc from Rick Mish

Message-ID: <961216175946.204044ac@gonzo.ccl.org>

Fellow anchorites:

I spoke with Rick Mish today, and he had several items for sale that I thought might be of interest to members on the list.

Please contact Rick at 419-255-6220, if you have interest in the following:

- o 23 ea VU meters (on left side) for R-390A. These are NOS and in original boxes. Radium dials. \$50 each plus shipping.
- o 8 pairs of R-390A meters (one for left and one for right). These are used, but in good condition, and work fine.
\$ 80 pair plus shipping.
- o 6 pair of top and bottom covers for the R-390A. Brand new manufacture. \$ 80 pair plus shipping.
- o 50 ea power cables for R-390. \$25 plus shipping.
- o 200 ea C-type connectors (not twin-ax) that fit R-390A antenna terminal \$ 5 ea plus shipping.
(Rick said he had 100 lbs of connectors!)
- o Several HP 3586-B Selective Level Meters, brand new, including manuals \$ 1,250 plus shipping

* * * * *

I have no connection to Rick other than being a very satisfied customer. Give Rick a call if any of the above fits a need you have...

73

S

Tom KE4RHH Bridgers@Leaders.CCL.org

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996

From: hdmeitzen@champion.aclic.com (HD Meitzen)

Subject: FS: 75A4, Series 1 S-Line, SX62

Message-ID: <9612161346.2F4CA0@champion-0845.aclic.com>

1. Still have 75A4 very nice receiver 3Kc filter condition is 8.5 to 9. Serial # 3380 or #1780. I think #1780 is a 9.2 but beauty is in the eye of the beholder.

2. 75S1,32S1,power supply and speaker (seperate units,I forget the model #'s). The 32S1 finals are soft, they are 6146's. Cosmetically these units are 9.5. NO SCRACHES or DINGS or finger rub spots. Sold as complete only. Solid rectifiers in the PS, unplug a put tubes in if you want.

3. SX-62 recaped works great looks 6.5 to 7.5. weight 55lbs.

Don't be shy, make offer. consider trade deal for 51S or KWS or other Collins eq.

Let you know Friday.

May this email find you and yours healthy and happy, Merry Christmas
Dave

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: "Gary F. Franklin" <103273.1070@CompuServe.COM>
Subject: FS: Globe King 400B / 75A-2
Message-ID: <961217012421_103273.1070_IHH67-1@CompuServe.COM>

Hello to all!

I have a Globe King 400B transmitter in nice shape cosmetically.... does need 5514 modulator tubes which can be found, or could be replaced with 811A's and a filament transformer change. The modulator works fine but you may want to do some audio shaping. I have coil sets for the 40,20 and 10 meter bands. Also have a Collins 75A-2 that is in good shape cosmetically . Has had the power transformer replaced, not an original and could use some TLC in terms of perhaps a couple of new tubes and an alignment..... the audio output drops off some as the runs for awhile.

Asking \$500 for the Globe King 400B, includes an extra V70D final.....Asking \$300 for the 75A-2....I can not ship these units.... will be willing to go half way, max 150 - 200 miles from Kalamazoo, Mi

Gary Franklin K8BKB
E-Mail: 103273,1070@compuserve.com
616-685-5792

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: owens@stout.atd.ucar.edu (Chip Owens)
Subject: FS: HQ-140 & Spkr.
Message-ID: <199612162202.PAA28856@atd.atd.ucar.EDU>

For Sale:

HQ-140 receiver, with clock and external speaker and original manual. Good condition, all original. \$150 plus shipping. I'm posting this for a friend without net access.

Chip Owens, NW00
owens@stout.atd.ucar.edu

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Matt Jodziewicz <mattj@orausa.com>
Subject: FW: Filament voltage
Message-ID: <01BBEB58.13BFB1C0@mattj.orausa.com>

I thought the following might be of interest to the group concerning filament voltage.

From: Alex Samson
Sent: Monday, December 16, 1996 9:39 AM
Subject: Filament voltage

Mat,
With all the attention to filament voltage control at the BA proch, I'd like to contribute some notes that maybe you could please forward to the porch.

In 1986, after some discussion with Varian Eimac regarding the reduction of filament voltage in order to prolong tube service life, one of their applications engineer sent me some documentations and a letter explaining Varians position relative to the topic. This is with regards to tubes with thoriated tungsten cathodes and not to tubes with oxide-cathodes.

The document (entitled "Extending Transmitter Tube Life") may be obtained by request from Varian (at least in 1986!). The document is known as Eimac application bulletin AB-18 and is actually a reprint from the March 1982 issue of Broadcast Management/Engineering.

The article is too long to retype here and I shall only summarize the novel:

Varian does not recommend a reduced filament voltage program for the first 200 hours of a brand new tube. Thereafter, "...Operating at filament voltages less than 10% is also risky, especially if the power to the transmitter drops at any time. A regulated filament supply may be necessary to prevent the "poisoning" effect which occurs at too cold filament..."

Article AB-18 states that a cold filament acts as a getter, that is, it attracts contaminants. When a contaminant becomes attached to a surface of the filament, that area is rendered inactive and loss of emission results. However, reduced

filament voltage if done properly can extend tube life.

AB-18 recommends lowering the voltage by no more than 5% and only down to slightly above the point at which a reduction in power output becomes noticeable.

Varian further states that tubes that have been in service for about more than 5000 hours may actually need to have their filament voltage increased in order to maintain normal performance.

Once again, this discussion pertains only to thoriated tungsten cathodes typical of the large 4CX series and (if memory serves) bulbs such as the 811A or 813. Refer to your tube specs to determine if this note is applicable.

In practice, I was running a filament voltage management program for a broadcast network and actually ran my filaments at about 93% and had good results for about 3 months but after receiving these bulletins, I corrected that habit as I was probably playing with uncertainty.

Hope this helps to promote BA enthusiasm to these wonderful tubes.

Alex Samson
KE6VKJ (looking for an SX42)

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Ben Bradley <bradley@norcross.mcs.slb.com>
Subject: Heath GD-1B grid-dip coil winding info
Message-ID: <2.2.32.19961216040128.0032000c@norcross.mcs.slb.com>

I wrote this up a while back, and hadn't posted it yet. I think someone wanted it, and hopefully it will be useful to enough folks to make it worth sending to the whole list.

I haven't done much with my 'second', no-coils Heath GD-1B grid dip meter, except to plug in a coil from my other GD-1B, and determine that this one doesn't work. But for the \$3 I paid, I'm not too dissatisfied. I hope to wind coils for it and fix it this year... too many projects, too little time.

Anyway, for anyone who might be interested, here is all the info you need for making the standard Heath GD-1B coils. And if you're not interested, just delete this message now...

The connector consists of two pins each 0.12 inch diameter, centers spaced 0.69 to 0.72 inch apart, extending 0.40 inch from the coil form.

100-250 MC 1/2 "turn" of 0.18 inch dia. metal, outside dia. of the half-loop is 0.90 inch, inside diameter 0.54 inch. The half-loop extends

0.61 inch away from the connector when plugged in, and is 0.92 inch tall (from the bottom of the connecting pins).

All of the following wound on 0.75 inch outside diameter by 2 1/4 inch long clear plastic forms, with a single-wrapped winding starting 1/5 inch from the end opposite the connector. I bought some PVC water pipe with 0.78" outside diameter to use for the coil form.

37-100 MC 3 1/5 turns 0.035 inch diameter wire. Wire goes straight up inside the form from the connector, through a hole in the form, then down at an angle (since the hole at 1/5 turn is not vertical with the connector pin) to the connector.

14-37 MC 8 1/4 turns, wrap is 0.19 inch long across 8 wire diameters, 0.22 inch long across 9 wire diameters.

5-14 MC 23 1/2 turns, wrap is 0.31 inch long.

2-5 MC 96 1/2 turns (count may not be exact), wrap is 0.63 inch long.

For two optional LF coils - info not available.

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: FPorzelt@seic.com
Subject: Heath Seneca
Message-ID: <vines.I,I8+UnKhmb@WAYNE.SEIC.COM>

Hi All. Hope everyone had a good weekend; I sure did.

I acquired a Heathkit Seneca Model VHF-1 2meter / 6meter transmitter. Cosmetically, front panel is 8.5 or maybe better after cleaning, case is about 7 or 7.5; some scratches. It weighs about 50 pounds.

Electronics look complete, relatively clean inside. The fellow had the unit on, so I could see that the tubes (at least the ones I could see readily) were lit along with the dial lights.

I got the original "assembly manual". It says the rig is for cw or "phone", but wonder what mode it would be? AM? SSB? FM? It doesn't mention in the manual. The manual has a copyright date of 1960; but there is also an 11/15/63 date (printing?) Is there a separate operator's manual for this rig?

I only have 2meter fm capabilities and don't have any 6meter; so won't be testing this real soon (although I got a 6meter halo with the radio).

The On/CW/STNDBY/Phone selector switch is really hard to turn, almost

"stuck". I'll have to see if the knob is rubbing against the panel, but it didn't appear to be at first glance. Any recommended "stuff" to unstick the selector?

I'd appreciate any comments, advice or suggestions anyone could throw my way! Is this considered a "good" radio? any idea of value? any "tips" for this rig or in general? Where / how should I start??? If anyone has more documentation on this (ie if there is an operating manual) the usual reimbursement offer applies. Is there anything special about a mike for this one (I didn't get one with the radio).

Thanks in advance for reading this and to anyone who is able to respond! Have a GREAT holiday season! 73,
Fred KB9MVU

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Bob Reynolds <breynold@sigg.com>
Subject: Heath Seneca -Reply
Message-ID: <96Dec16.104405cst.19624@firewall.sigg.com>

The Seneca is Am & CW. I used one for working OSCAR 6, 7, & 8 but could never get the VFO to settle down on 2 meters, 6 was as stable as a rock.

>>> <FPorzelt@seic.com> 12/16/96 09:30am >>>
Hi All. Hope everyone had a good weekend; I sure did.

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Cosmetically, front panel is 8.5 or maybe better after cleaning, case is about 7 or 7.5; some scratches. It weighs about 50 pounds.

Electronics look complete, relatively clean inside. The fellow had the unit on, so I could see that the tubes (at least the ones I could see readily) were lit along with the dial lights.

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Thanks in advance for reading this and to anyone who is able to respond! Have a GREAT holiday season! 73,
Fred KB9MVU

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Jan Ohlberg <jan.oberg@kdc.se>
Subject: Heathkit SB-630
Message-ID: <32B5BBA9.68AE@kdc.se>

What's a reasonable price for a Heathkit SB-630 in good condition but not mint condition?

Also I'm looking for the schematics of the noise blanker in Heathkit SB-104. Does anyone have it and could perhaps share a photocopy with me?

Regards Jan (SM7VVG)

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: dr.electron@juno.com (Richard L Paton)
Subject: Hot Glass & Heavy Metal
Message-ID: <19881216.071715.13495.0.dr.electron@juno.com>

dr.electron for WB6TAP:

Help, Please!

Hello. I,m new here & glad to meet you all.

I have been attempting to restore (to operation) a military receiver built by

National, which appears to be 50s/60's vintage. Nomenclature is:

AN/URR-35A , Receiving Set, Radio, Receiver, Radio, R482 A/URR-35

The rig has apparently

zero hours on it, judging from overall condition, pristine # 47 pilot lamps (no blacking whatsoever), and a total absence of dust buildup at all on the internal cooling fan. (!)

Indicated coverage is 220 MC to 400 MC. The construction & attention to detail of this unit is stunning & absolutely a work of art. Vacuum tubes are all

original, Sylvania (JAN5670's)and Raytheon (all others).

My questions re this rig are:

1. Navy procurement vintage?
2. Intended Use?
3. Availability of documentation?
4. JAN 5670's ! I Cannot find any info on this tube (have many old manuals & data). What is it? All other tubes check out on my Hickok 800 tester, but these seem to have values all over the place. The only reference I've seen is on the 800's roll chart (OCT 1957).

Documentation?

Availability? Substitution?

5. Anyone's user / repair experience / performance comments.

I have have some heavy duty MIL 60 Hz high voltage transformers and would be willing to trade or info and assistance on this.

Rich Paton

dr.electron@juno.com for WB6TAP.

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996

From: Dean Davidson <ddavidso@metz.une.edu.au>

Subject: Re: Hot Glass & Heavy Metal

Message-ID: <3.0.1.16.19961217090747.2c4f8f02@metz.une.edu.au>

At 09:27 16/12/96 -0600, Rich Paton wrote:

>4. JAN 5670's ! I Cannot find any info on this tube (have many old
>manuals & data). What is it? All other tubes check out on my Hickok
>800 tester, but these seem to have values all over the place. The only
>reference I'e seen is on the 800's roll chart (OCT 1957).

My trust Babani Equivalents book says that a 5670 is the same as
a 6CC42. Now what is a 6CC42!

Cheers,

--

Dean Davidson Web Page: <http://www.une.edu.au/~psychology/deand.htm>

Dept Psychology

Email: <mailto:ddavidso@metz.une.edu.au>

University of New England

Phone: 61 67 73 2585

Armidale NSW 2351 Australia

VK2 ZID

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: "Jim Zellmer" <zellmer@raccoon.com>
Subject: Re:HP 170 Oscope manual
Message-ID: <199612170149.TAA07269@slip1.raccoon.com>

I have a new Hewlett Packard Oscilloscope manual. Does not got with my scope.

The manual is for:

- Model 170B, 170BR
- Oscilloscope
- Serials Prefixed: 423-
- Model 162C
- Daul Trace Amplifier
- Serials Prefixed 416-
- Model 166F
- Auxillary Plug-In
- Serials Prefixed: 416-
- Stock No. 170B-901

This manual covers the AN/USM-140B and related Accesories.

Does anyone out in BA land need this manual. Offers or trades accepted.

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Al Klase <alklase@prolog.net>
Subject: HRO-500 Help
Message-ID: <199612161348.HAA03193@uro.theporch.com>

Well at least it's heavy,

I need the schematic for the frequency synth portion of this set. I have the manual and the general schematic. I'm also looking for advice from someone who's worked on on of these gems.

73,
Al

Al Klase - N3FRQ
alklase@prolog.net
Flemington, NJ

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Dale Braun <dale.k.braun@uwrf.edu>
Subject: HX-10 Marauder Hint
Message-ID: <s2b514bd.078@adngate.adn.uwrf.edu>

My latest bench project is bringing a HX-10 Marauder back to life. After fixing the VFO (dirty tuning cap contacts), the unit put out full power and sounds great in all modes - good rig. But the break-in function on CW never worked. Traced it down to inadequate side tone oscillator input to the VOX circuitry. The side tone oscillator puts out like 2 volts peak, but the coupling cap is only 7.5 picofarads. So I increased the size of the coupling cap with a junkbox cap to around 1500 pf and that did the trick.

By the way, anybody have experience using the HX-10 on FSK?

73,
Dale
WD9GWH

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: TPHAAK@ccmail.monsanto.com
Subject: RE: Meter Faces & crystals
Message-ID: <00304000020723710000002*@MHS>

Gang,

Have any of you ever had meter faces restored? I have a phenolic meter panel with 5 square faced meters all of which have changed from white to some value of yellow. I have had aircraft instruments rebuilt and in most cases they "refaced" to like new but I haven't called any of them to see if they would do just the faces of my meters. Any suggestions??

I will be needing some FT-243 or HC-6U type crystals in the 1KC , 2KC, and 3.5KC range for a transmitter that wants to use 2X or 4X the xtal frequency to operate (160, 80, 40). Last time I ordered anything was from CW which tells you how long it's been. Would anyone have suggestions on who I could go to to have some made? I understand JAN might be able to do these ranges. I have room to install some type of xtal adapter although I cannot change the existing socket assembly which takes the FT-243 pin and spacing.

Tim WA0TSY
tphaak@monsanto.com

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Randy Zelick <h2rz@odin.cc.pdx.edu>
Subject: re: MHz electronics
Message-ID: <Pine.PTX.3.91.961216100620.10218A-100000@odin.cc.pdx.edu>

To whomever was interested in MHz electronics, they are still alive and well as far as I know. I called their 800 number this morning with positive results. I have used them to obtain late model test equipment for work. In this capacity they are expensive, but reliable and the equipment always comes checked, and often calibrated, well boxed and with a copy of the manual.

They are at 3802 N 27th Ave, Phoenix, AZ 85017
The test equipment/warehouse number is 602-278-4062
The main number is 800-528-0180

Good luck,

=Randy=

R. Zelick
Dept. Biology
Portland State University
P.O. Box 751
Portland, OR 97207
503-725-3086, 503-725-3888 (fax)

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Pete McCollum 16-Dec-1996 1128 -0700 <mccollum@ssdevo.UNET.dec.com>
Subject: mil equip.
Message-ID: <9612161829.AA12289@us3rnc.pa.dec.com>

Some of "my stuff" - this is not everything, but all the most important stuff. Not sure what "complete" is supposed to be - what I mean is that the basic unit is not missing anything; I do *not* mean that I have *all* the accessories.

TYPE UNIT	ORIGINAL	COMPLETE	WORKING
or SYSTEM	or MODIFIED	or INCOMPLETE	or PROJECT

VRC-10	ORIGINAL	COMPLETE	WORKS
RT-68, RT-70, AM-65, PP-112, MT-299, etc.			

will soon have a GRC-8 (MT-297 on the way) - need an R-110 to make a GRC-7

GRC-109 ORIGINAL COMPLETE WORKS

RS-1 ORIGINAL COMPLETE WORKS

RS-6 ORIGINAL COMPLETE WORKS

GRA-71 ORIGINAL COMPLETE WORKS

TCS-14 ORIGINAL INCOMPLETE PROJECT
rx, tx, ACps, speaker/control, cables, matching serials, xmtr is
missing many internal pieces

BC-230 xmtr ORIGINAL COMPLETE ?
with mount

BC-229 ORIGINAL COMPLETE WORKS

MAB r-t ORIGINAL INCOMPLETE ?
no mic

ABA-1 IFF ORIGINAL COMPLETE ?
no accessories

PRC-25 ORIGINAL COMPLETE WORKS

BC-603 ORIGINAL COMPLETE WORKS

SCR-522 ORIGINAL INCOMPLETE ?

FR-38/USM-26 MODIFIED COMPLETE PROJECT
fan changed w/several plug-ins

ARC Type 12 ORIGINAL ?
several rcvrs/xmtrs

OS-8 ORIGINAL COMPLETE PROJECT

OS-4/USM-25 ORIGINAL COMPLETE WORKS

OS-57/USM-38 ORIGINAL COMPLETE PROJECT

PRC-6 ORIGINAL INCOMPLETE ?
no antenna

PRC-10 ORIGINAL COMPLETE ?

PRC-40AX ORIGINAL INCOMPLETE PROJECT
no xtals

PRT-4 ORIGINAL COMPLETE WORKS

PRR-9 ORIGINAL INCOMPLETE WORKS
no antenna

R-4A/ARR-2 ORIGINAL COMPLETE ?

T-23/ARC-5 MODIFIED COMPLETE WORKS

T-23/ARC-5 ORIGINAL COMPLETE ?

a couple of misc. HF ARC-5 boxes, most are modified

R-390A ORIGINAL INCOMPLETE WORKS
no meters

R-484/APR-14 MODIFIED COMPLETE WORKS

R-836/ARN-59 ORIGINAL COMPLETE ?

RBM MODIFIED INCOMPLETE PROJECT

RT-18/ARC-1 ORIGINAL COMPLETE ?
have two, one with mount

R-1051B ORIGINAL COMPLETE WORKS

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: peterada@mindspring.com (Peter Adams)
Subject: Military Equipment
Message-ID: <199612170243.VAA17817@borg.mindspring.com>

TYPE UNIT or SYSTEM	ORIGINAL or MODIFIED	COMPLETE or INCOMPLETE	WORKING or PROJECT
ART-13B	ORIGINAL	COMPLETE	WORKING
DY-17	ORIGINAL	COMPLETE	WORKING
BC-348	MODIFIED	COMPLETE	WORKING
	> FILAMENT STRING TO 6V, OUTBOARD P.S.		
T-368	MODIFIED	COMPLETE	WORKING
	> SPEECH AMP MOD FOR IMPROVED TRANSMIT AUDIO		

R-390A (2)	ORIGINAL	COMPLETE	WORKING
R-390A (1)	ORIGINAL	COMPLETE	PROJECT
BC-342	ORIGINAL	COMPLETE	WORKING
TV-7D	ORIGINAL	COMPLETE	WORKING
T-195	ORIGINAL	COMPLETE	WORKING
R-392	ORIGINAL	COMPLETE	WORKING
MT851/GRC-19	ORIGINAL	COMPLETE	WORKING
>THIS IS THE 491b. MONSTER MOUNT THAT HOLDS THE			
T-195 AND		R-392	
>TRULY A BOATANCHOR THOUGH PASSIVE AND SOLID STATE			
CV278	ORIGINAL	COMPLETE	UNKNOWN
MD203	ORIGINAL	COMPLETE	UNKNOWN
SG/44	ORIGINAL	COMPLETE	WORKING

As with others these are the interesting bits , more junk about but less interesting.

Peter Adams
N4KIA
Near Atlanta, GA

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: "Joseph W. Pinner" <kc5ijd@net-connect.net>
Subject: My mil collection - addendum
Message-ID: <199612161217.GAA15988@dns1.net-connect.net>

Well, it seems that I left out a few items from my mil collection list so I thought I would offer this addendum:

TYPE UNIT or SYSTEM	ORIGINAL or MODIFIED	COMPLETE or INCOMPLETE	WORKING or PROJECT

ARC-39	Original	Complete	Project
ARR-15	Original	Complete	Project
ARR-15	Modified	Incomplete	Working
ATD (w/dynamotor)	Original	Incomplete (missing cables & control box)	Project

CPRC-26 (Canada)	Original	Complete	Working
GRC-14/R-808	Original	Complete	Working
SG-1144	Original	Complete	Working
TV-2B	Original	Complete	Working
TV-7D	Original	Complete	Working
USM-116	Original	Complete	Working
USM-338	Original	Complete	Working

73

Joseph W Pinner
 Lafayette, LA
 KC5IJD
 EMail: kc5ijd@net-connect.net

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
 From: Robert Fowle <hammarlund@jacksonmi.com>
 Subject: new page up "Other Manuals"
 Message-ID: <32B5EE3B.2077@jacksonmi.com>

Hi All;

put up another page on my web site for "other Manuals"
 ameco, national, collins..you get it...the 'others'
 enjoy

--

**** Please, Visit my Web Page.....****

=====]-[->

Robert Fowle KC8DBC
 1215 Winifred
 Jackson, Mich. 49202-1946
 Ph. 517-789-6721
 E-mail: hammarlund@jacksonmi.com
 Web Page: <http://www.jacksonmi.com/hammarlund>

NOW... BOATANCHORS Conference!
 talk, buy-sell-trade all in one place!

Moderator: Robert Fowle
at: <http://www.inetnc.com/hamchat/>

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: "David L. Thompson" <thompson@mindspring.com>
Subject: Origin of Digi-Key Electronics
Message-ID: <199612160651.GAA13920@mule1.mindspring.com>

There has been discussions on the contest reflector about College club calls, who operated from what college, and early electronic keys. I used that Eldico info about the EE-1 (circa 1950) and earlier discussions about the MON-KEY (who put that up on their web page last Spring..I trashed my records and can't remember) that first appeared in about 1948 from Electric Eye Company.

One message had this content:

>About this time (1968) I began seriously trying the SS from W0 Yellow Chicken (UMinn) under >the>guidance of Prof. Dick Halvorsen (W0ZHN) and his post-doc Ron Stordahl (K0UXQ?).
(I looked it up and K0UXQ is still correct).

>Historical note: Ron and Dick started a company whose only product was the first commercial >solid state IC keyer. It used DTL logic and ran off a single "D" cell. They had a nice business >going for about two years.

>Ron quit to take over his fathers trucking company up in Thief River Falls, MN, but kept a finger >in the electronics business by selling the keyer and other parts by mail order.

>The name of the keyer was "The Digi-Key".

After a few years the mail order outfit really took off. Ron called it the same name as the keyer.

All that goes around comes around I guess. Wonder if the trucking business did as well?

73, Dave K4JRB

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: K1EL@aol.com
Subject: Re: Origin of Digi-Key Electronics
Message-ID: <961216080957_641257994@emout02.mail.aol.com>

> During the war I only saw proximity fused shells fired in anger. Something
> like 40 percent of the shells exploded prematurely as soon as they armed
> which fortunately was at a good distance from the gun that fired them. After
> the war I was involved in a Raytheon program with NBS to further improve
> performance in rockets.

Getting the proximity circuitry to turn on reliably, yet not immediately
detonate the fuse was a real trick. A friend and former coworker, the
late Jim Henry, worked at Kodak's Apparatus Division at the start of WWII
developing many of these fuses. Many of his patents were classified and
not actually issued until the 1980's - even though they used tube circuits.
He was transferred from Rochester to Tennessee to work on the
electromagnetic isotope separation program at Oak Ridge (where Tennessee
Eastman was the prime contractor - the cover name was the Clinton Machine
Works). Kodak loaned the government almost their entire inventory of
silver which was drawn into wire which was used to wind the coils of the
magnets at Oak Ridge. When this separation process was abandoned in
favor of gaseous diffusion, the silver was returned.

> There is a splendid very detailed article in the most recent issue of the
> Quarter Century Wireless Association Journal which tells all about the
> proximity fused shells and how they operate. It is complete with circuit and
> pictures of the layout that was tucked into the nose of the shell. I
> recommend it to all. There is far more in it than I was allowed to know
> during that NBS program. But times change.

>

> Frank K6NL

I would love to have a copy of this article.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: bdhall@ghg.net (Benjamin D. Hall)

Subject: R-390 to R-390A engineering report

Message-ID: <32B5D6C5.33F1@GHG.net>

Hiya folks, lots of folks have written to ask for copies of the
engineering report that details the cost saving measures of the R-390A
over the R-390. Anyone else want a copy? I'm going to run them off at
work so let me know. I'll be mailing them Wednesday, so let me know
now!

And no, I don't need reimbursement for postage or any of that. Too many
folks here have been way too good to me and I like to pay them back this
way.

Drop me e-mail ASAP with your snail address before I head home to stuff myself silly with Mom's cooking and before I grow too fat to move!

Thanks and 73,
Ben

--

From the computer of	Collector of fine firebottle
Benjamin D. Hall, Houston Texas	equipment, as well as other things
BDHall@GHG.net (home) -or-	involving Earth, Air, Water, and
Benjamin.D.Hall1@JSC.NASA.gov	Fire.

PLEASE NOTE MY NEW HOME E-MAIL ADDRESS above. My old address, BDHALL@GHGCorp.com, will still work for a period of time however.

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: n5off@w5ddl.aara.org
Subject: R-725 Alignment
Message-ID: <531291@w5ddl.aara.org>

The alignment takes only two steps.

- 1) Do the R-390A alignment on everything except IF deck
- B) Do the R-390 alignment on the IF deck

What could be easier?

The details get deeper if you are trying to swap IF decks or PT0's, but if is not in need of a module swap, just see 1 and B above.

Sounds like a nice rig. Have fun with it, Ben.

73 de tom

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: joe.selkregg@amail.amdahl.com
Subject: Racal: Info Needed.
Message-ID: <m0vZoLN-00000EC@juts.ccc.amdahl.com>

I have an opportunity to purchase a Racal RA6117-A1 receiver and have some questions about it before I go ahead.

Are there any peculiarities/problem areas that I should know about?

Are there any unique features to this model?

I had a chance to try the set and it seems to be very stable but sensitivity only seems to be about as good as my S19R Sky Challenger...is this the norm?

Also, 500kc-1mc band is nearly dead.

The set is in otherwise good condition with all parts and no mods.

The asking price is \$120.00. Is the reasonable? Seems like with a little work, it could be an excellent receiver for the money.

Is there a source for parts or a manual by someone who specializes in Racals?

Thanks a lot,

Joe Selkregg

joe.selkregg@amail.amdahl.com

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: "Robert S. Ross" <radiorob@serix.com>

Subject: Radio Books....

Message-ID: <199612162350.XAA17234@cm.serix.com>

All prices in USA Dollars...and shipping is EXTRA.

Email me DIRECT at radiorob@serix.com to reserve any of these items.

#####

RCA Radio Parts Catalog. RCA Victor Canada. Specialties for the Radio Service Engineer. 1937. 68 Pages. Loaded with Photos. Includes Receivers and Transmitters. Colour Cover. Real hard to find...even here in Canada!!
EXC. Condition. PRICE.....\$25.00

#####

Radio Amateur Newcomer. Frank Jones Publication. 1930's. 34 Pages. Similar to the ARRL Hints and Kinks Booklets. Tons of Photos and nice Ads.
VG+ Condition....but one order form has been cut out. Still Nice.
PRICE.....\$8.00

#####

Hallicrafters International Shortwave Station List .1952 Lists all SW Stns on the air...
EXC. Condition. PRICE.....\$3.00

#####

Hammarlund ShortWAVE Manual 1935 Edition.2nd Edition. ORIGINAL...this is NOT THE REPRINT!! 16 Page booklet full of Homebrew projects ...using Hammarlund Parts. Lots of Photos. This is GREAT....EXC. Condition. PRICE.....\$20.00

#####

Hammarlund ShortWave Manual 1936 Edition , 3rd Edition. ORIGINAL...this is NOT THE REPRINT!! 32 Pages ...as above but with Colour Cardboard Cover, and Smaller sized booklet.

EXC. Condition. PRICE.....\$20.00

#####

Mallory- Yaxley Approved Precision Radio Products. 1937 Canadian Catalog. Large sized Catalog 34 Pages...lots of photos.

EXC. Condition. PRICE.....\$8.00

#####

EICO Catalog. 1959. Original Catalog.

VG Condition. PRICE.....\$8.00

#####

Newark Electronics. 1961 Catalog.#71. Original. Lotsa Pages.

VG+ Condition...but front cover has a stain where someone put a coffee cup on it!!

PRICE.....\$8.00

#####

Newark Electronics. 1965 Catalog # 80. Original. Bigger than the previous one!!

VG++ Condition. PRICE.....\$8.00

#####

Industrial Electronics and Control. By KLOEFFER. 1949. . 7th printing 1957. Hard Covered book. 478 Pages. Illustrated and tons of photos. Lots of Boatanchor/Tube stuff included.

EXC. Condition. PRICE.....\$15.00

#####

Radiotron Designers Handbook. 3rd Edition. By RCA/Langford Smith. 1941. 352 Pages.Hard Covered Book. This is the smaller Black Book.....

EXC. Condition. PRICE.....\$20.00

#####

Radio Engineering handbook. By Henney. 1933. Small Leather covered book.583 Pages. Illustrated...covers all aspects of radio.

VG+ Condition. PRICE.....\$20.00

#####

Radio Physics Course. By Ghirardi. 2nd edition. 1936. Big thick hard covered book...with lots of pages. One of the bibles of Early Radio...

Exc. Condition. PRICE.....\$20.00

#####

Radio Trouble Shooter's Handbook. By Ghirardi. 1943 3rd Edition. Large sized
Hard covered book with repair data for tons of Early Radios. Another Bible.....

EXC. Condition. PRICE.....\$25.00

#####

Robert S. Ross VA3SW
London, Ontario, CANADA

Radio DX'er
Antique Radio Enthusiast

Stuck in a time warp..and lost in the ozone again!!!!

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: "Robert S. Ross" <radiorob@serix.com>

Subject: RADIO Literature for SALE.....

Message-ID: <199612162245.WAA16608@cm.serix.com>

All prices are in USA DOLLARS....and SHIPPING is EXTRA. Please EMAIL me
DIRECT at.....

radiorob@serix.com to reserve any of these items.

#####

Scott Allwave 15 Communications Receiver. Photocopy of Technical Description
Manual. 1934. 8 Pages.

EXC. Condition. PRICE.....\$4.00 USA

#####

Shure Microphones. General Catalog # 55A. 1950's. 12 pages with colour
cover...lots of photos...real nice.

EXC. Condition. PRICE.....\$8.00 USA

#####

Shure Microphones. Catalog # 157. 1947. 12 Pages with colour cover. GREAT
Photos. This is a beauty.

EXC. Condition. PRICE.....\$10.00 USA

#####

Stancor Hamanual. 3rd Edition 1937. Amateur Transmitter Circuits. 44 pages
with colour cover and LOADED with Transmitter Photos. This is an Amazing
Catalog!!

VG+ Condition. PRICE....\$15.00 USA

#####

SUBRACO MT-15X Mobile Transmitter. Original Instruction Manual.24 Pages with
Colour Cover...lots of Photos and schematic.

EXC. Condition. PRICE.....\$8.00 USA

#####

Thordarson ...Original Company Brochure. Multi- Band Transmitter.
Infosheet/Schematic/Parts. 1939. With Photos.

EXC. Condition. PRICE.....\$3.00 USA

#####

Thordarson....Original Company Brochure. Speech Amplifier. Info
sheet/Schematic/Parts list.With photos.

EXC. Condition. PRICE.....\$3.00 USA

#####

Turner Microphones. Original Company Mini Catalog. M-1.Original. 1941. 4
Pages with great photos. Pricelist/specs.

EXC. Condition. PRICE.....\$6.00 USA

#####

Universal Microphones. 1946 Catalog. Original. 8 Pages with colour. Lots of
nice photos. Pricelist and Specs.

EXC. Condition. PRICE.....\$7.00 USA.

#####

Robert S. Ross VA3SW
London, Ontario, CANADA

Radio DX'er
Antique Radio Enthusiast

Stuck in a time warp..and lost in the ozone again!!!!

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: "Robert S. Ross" <radiorob@serix.com>

Subject: RADIO Literature for SALE.....

Message-ID: <199612162301.XAA16771@cm.serix.com>

Hello Guys:

All prices are in USA DOLLARS....and SHIPPING is EXTRA. Please EMAIL me
DIRECT at.....

radiorob@serix.com to reserve any of these items.

I hope everyone has a real nice Holiday Season....

73...ROB.

#####

Heathkit Original Company Spec Sheets...These were put out by the Heath Co.
in the 1960's and are similar to SAM's Photofacts with a Photo on the front,
Schematic, Parts List etc. Real Nice . Most are 4 pages.

I have the following sheets available.....

SB-401 SSB Transmitter....1966

GD-125 Q Multiplier.....1965

SB-200 Linear Amp.....1965

SB-300 SSB Receiver.....1965

SB-301 SSB Receiver.....1966

SB-310 S/W Receiver.....1967

GR-64 S/W Reiver.....1965

GR54 SWL Receiver.....1965

HP-23 AC Power supply.....1963

HP-24 AC Power Supply.....1965

Heathkit HN-31 Dummy Load.1962

HD-15 Hybrid Phone Patch..1965

HM-15 SWR Bridge.....1965 EXC. Condition on all PRICE.....\$5.00 EACH

#####

Heathkit SW-717 Shortwave Receiver. Original Assembly Manual. 1971.

Condition VG+ PRICE..... \$10.00

#####

Heathkit DX-60B Transmitter. Original Assembly Manual. 1967.

Condition VG++ PRICE.....\$12.00

#####

Heathkit HW-30 Two'er Transmitter. Original Assembly Manual.

Condition VG...but Crudely 3 hole punched. PRICE.....\$10.00

#####

Heathkit W5M Williamson Amplifier. Origional Assembly Manual. 1957.

Condition VG+ PRICE.....\$12.00

#####

Heathkit Catalog. Summer 1972 .#810/72D. Original.

EXC. Condition. PRICE.....\$15.00

#####

B&W Catalog. Barker and Williamson Electronic Equipment. 1960's?? 16 Pages,
Colour. Includes the B&W 5100 B Transmitter.

EXC. Condition. PRICE.....\$7.00

#####

Johnson Viking...Original Colour Brochure. 6N2 Converter. Photo,Schematic,
Instructions.

EXC. Condition. PRICE.....\$4.00

#####

KenwoodOriginal Colour Brochure. T-599A/R-599A Twins. Trans/Rec'r. 4
Pages. Photos,specs,features.

EXC. Condition. PRICE.....\$4.00

#####

KW Electronics...Spec Sheet. Original. KW202 Rec'r/KW204 Trans. Specs/Features.

EXC. Condition. PRICE....\$2.00

#####

KW Electronics....Spec Sheet. Original. KW105 Antenna Tuning System. Specs,
Photo, Features.

EXC. Condition. PRICE.....\$2.00

#####

KW/Decca Communications Equipment Catalog. early 1970's?? Small sized
British Boatanchor Catalog.

EXC. Condition. PRICE....\$4.00

#####

Robert S. Ross VA3SW

London, Ontario, CANADA

Radio DX'er

Antique Radio Enthusiast

Stuck in a time warp..and lost in the ozone again!!!!

Robert S. Ross VA3SW

London, Ontario, CANADA

Radio DX'er

Antique Radio Enthusiast

Stuck in a time warp..and lost in the ozone again!!!!

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: k9gdt@juno.com (George P Sieverson)

Subject: SB610 Monitor Scope

Message-ID: <19961216.161053.10854.1.K9GDT@juno.com>

Greetings Bulbaholics,

My SB610 went belly-up yesterday. It happened while I was talking on 2m FM using solid-state gear. (Hmmm....I wonder if there's a message here.) At any rate, I'm now in need of a .15uF, 1600V axial lead capacitor. I tried AES and they can't help. I guess there's a first time for everything.

Does anyone have one they can part with? Will gladly pay usual and customary fees. Thanks.

Cheers 'n beers,
George

George Sieverson
Barrington, IL
K9GDT@JUNO.COM

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Michael Crestohl <mc@shore.net>
Subject: SP-600
Message-ID: <199612161305.IAA14907@northshore.shore.net>

Hello Ben:

I have two SP-600s here. Their particulars are:

SP-600-JX s/n 2139
SP-600-JL s/n 1765

Neither have military dogtags.....

I just got them on Saturday from a fellow in Montreal. the JL is a parts unit (or a real fixer-upper). They cover VLF and 1.6 to 28 megs - no broadcast band.

The fellow I got them from has another JX with the crystal oscillator and I believe it goes from 540KC to 54 Megs. It was playing when I sent over there on Saturday but it needs a lot of work both cosmetically and electrically.

The -JX I got was missing a couple of tubes and looks like it might clean up nicely. I have not applied power to it yet.

I have never owned a SP-600 and it wasn't high on my priorities of big heavy 1950s receivers. I want to compare one to my GPR-90 and see which one I like better.

Watkins-Johnson RX, but I have an R-390 that I want to use with it. Anyone have ANY info on this unit?
Anyone have a good simple schematic for a mixer to up-convert the IF from my 390 to the IP-805. Scan width at min seems to be less than 25 KC, so should work if I can get the IF up there. And simply.

Thanks for any help.

Tom Norris KA4RKT
badger@telalink.net

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: Mike Sewell <75143.2737@CompuServe.COM>
Subject: RE: Subject: 100V On the Air Again!
Message-ID: <961217014230_75143.2737_IHV65-2@CompuServe.COM>

Earlier, Bill wrote;

>I hope to hear comments from other owners about "hum" in their 100V's and
>what, if anything, they did about it.

Bill,

I battled the 100V hum problem some years ago without glorious success. After determining the same thing you did (that it's pickup and NOT supply probs), I tried rerouting the low-level mic cable from the connector to first speech amp. That resulted in 'some' improvement, but, didn't cure it. Decided that it was 'good unuff' and quit. It might be worth pursuing several different routings of this fairly long (as I remember) low-level line.

Good luck and let us know what works!!

73, Mike

K 0 Collects Radios eXclusively

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: RE: Subject: 100V On the Air Again!
Message-ID: <Pine.ULT.3.95.961216195645.21282H-100000@admin.aurora.edu>

On Mon, 16 Dec 1996, Mike Sewell wrote:

> Bill,
>
> I battled the 100V hum problem some years ago without glorious success.

If I may butt in on this thread, perhaps the problem is a ground loop. I recently have come to realize that grounding in low level audio stages is a real art. This is especially true if the filaments are using the chassis as the ground return. In that case, all the audio grounds must go to one point only. Even the newer SS rigs do this to some extent, using separate MIC and PTT grounds at the MIC connector to eliminate processor noise.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: Pete McCollum 16-Dec-1996 1315 -0700 <mccollum@ssdevo.UNET.dec.com>
Subject: T-23/ARC-5 on 6M
Message-ID: <9612162015.AA00458@us3rmc.pa.dec.com>

Hi gang,
I recently was successful in re-tuning a T-23/ARC-5 xmtr for 6M. I thought it would be good to document what happened, so that the next person can do it a lot quicker than I did! Thanks to Jim Evans for sending me some pages out of one of the Conversion Handbooks - it helped a lot.

The T-23/ARC-5 is designed to do 100-156 mhz, on 4 channels. It has rotating turrets that change the coils in 5 different tank circuits. The tube lineup is: 1625 osc/doubler, 1625 tripler, 832A tripler/driver, and 832A final.

The plan was to keep the T-23 working on 2M as well, so my mods would all have to be done to the coil turrets. Also, I didn't want to change anything that was irreversible, so I kept the filament circuit at 24V, and kept all the relays in place and functioning.

Here's what I did:

- I chose channel A to be the 6M channel on 50.4. Channel D was already tuned up and running on 2M, so I knew that everything worked.
- My 8.400 (50.4) xtal is an FT-243. The T-23 is made for CR-1's, which have the same 1/2" spacing, but the pins are fatter. This was solved by using the center pins from a couple of RCA phono plugs: they slide right onto the FT-243 pins, and then allow the xtal to be plugged into the CR-1 socket.
- Using the A-channel coil, the oscillator wouldn't tune quite high enough to run at 8.400 (really it doubles to 16.800). In retrospect, I probably

should have used channel B or C, since they would have run at 8.4 directly. The thought was that the channel A driver and final would be closer to 6M than the other channels, so I chose A. Anyway, I removed about 5 turns from the osc tank coil to make it tune 8.4.

- The second stage is a tripler, which takes us to 50.4. Again, this coil was having trouble reaching 50.4. So, I swapped the coil with one of the B or C coils.

- The third stage is designed to be another tripler (for 2M), but we are already at 50.4, so it's tank needed to be lowered *considerably*. I did this by adding 20pf to the tank. I soldered two 10pf NP0 caps directly to the coil, so that the tank would only be changed for this particular channel. Note that the tank circuits in the T-23 have no actual capacitors - all the "C" comes from tube electrodes and stray wiring C. The Surplus Conversion article said to remove this stage entirely, and use the first tripler to drive the final. That would work, but it be a much bigger mod, and would prevent 2M from working on channel D.

- For the final tank, I followed the Surplus Conversion article, which said to replace the coil with 19 turns of #18 enameled wire. I actually used #17 wire, and about 25 turns. At first, I had tried adding "C" to the tank (using the original 5-turn coil), but I was never able to get it to load up properly (the final plates would glow a dull red, and there was very little power output).

- The output coupling is a 1-inch diameter loop around the final's tank, with a small air-variable C in series with it, making a tuned output. The original link coil was less than 1 turn - I replaced this with about 2 1/2 turns. Also, I added 5pf in parallel with the variable C. This combination tunes up nicely on 6M.

- I use a 24VDC Lambda supply for the filaments and relays (and the channel-change motor), and I have separate home-brew supplies for 250V screen and 500V final.

- Adjusting the coils requires a 3/16" hex socket that is skinny enough to get inside the coil forms, yet something non-metallic is desirable. I found some soft-rubber tubing that presses onto the hex heads with just enough friction to allow me to adjust them.

- I am now working on building a modulator that copies the MD-7 design (a pair of 1625's, driven directly by a mic transformer and a carbon mic).

I hope this info is helpful to someone.

Pete

mccollum@ssdevo.enet.dec.com

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: km1h@juno.com

Subject: Tnx for AC4 -T4XC Info

Message-ID: <19961216.180619.7311.22.km1h@juno.com>

Tooooooooo many replies to thank individually but thanks to all. The AC3 was 120V only whereas the AC4 was switchable 120/240V.

Now Im looking for a real clean T4XC and AC4 or MS4 to send to a friend in EU. Anyone have one for sale?

Tnx.....Carl

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Morris Odell <morriso@vifp.monash.edu.au>
Subject: Re: Troubleshooting IF Cans??'s
Message-ID: <32B4D9B4.87A@vifp.monash.edu.au>

Hi all,

Dave Metz wrote:

>

>

> If IF cans are running in the RF spectrum, why does one need to use the
> 200CD which is the
> audio generator at the 455khz? Could it also be possible to use a URM25D
> with the easily
> attenuated signal?

The 200CD is a convenient device as it extends up to 455 khz, produces a sinewave and has lots of output to spare. It has a low output impedance however which acts as a voltage source.

> Add a bunch of resistance to the output leads (you
> >can experiment to get results), and hang a voltmeter across the coil
>
> This is probably like not being able to see the forest for the trees but
> what is the objective of the resistance so that I would have a clue as

The object of adding resistance is to simulate a high impedance current source. Larry Ware mistakenly described it the opposite way as a zero impedance voltage source which I'm sure was a "slip of the key" on his part. Most amplifying devices such as tubes in grounded cathode mode have a high output impedance and act as current sources. It's only when fed with a current source that parallel tuned circuits exhibit the voltage peak we all expect from them. (If you connected them across a low impedance voltage source, the voltage across them would never vary.)

That's a simple explanation of why we advocate injecting into the tuned circuit directly with a series impedance. Of course, if you're injecting

into the preceding grid you can inject from a voltage source and let the tube do the current sourcing for you.

As I understand Hank's posting, he was talking about emulating a Q meter with a voltage source in series with a resistor. That's yet another story and goes back to the derivation of Q by comparing tuned circuit response with varying series resistance. I suppose most of us are primarily interested in properly tweaking the IF coil rather than working out its Q although that can be useful in some troubleshooting situations such as broken strands of Litz etc.

This is not quite the same theory behind loading the winding you are ~~not~~ tuning in stagger tuned IFs - that's a different story which will no doubt get an airing here.

73

Morris VK3DOC

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: Troubleshooting IF Cans??'s
Message-ID: <199612160719.AAA06389@netcom16.netcom.com>

As Dave Metz discourses

>

> If IF cans are running in the RF spectrum, why does one need to use the
> 200CD which is the
> audio generator at the 455khz? Could it also be possible to use a URM25D
> with the easily
> attenuated signal?

I use the 200CD, which will go up to 600 Khz because:

1. It tunes up to 455 easily.
2. Output is constant amplitude. No false peaks.
3. Plenty of volts available. You can add plenty of resistance and attenuation, and still see things easily on an AC voltmeter or scope.
4. I don't have a URM25. My generators all put out about 100 mv. max., out of low impedance.
5. 200CD output is a relatively pure sine wave, so you don't have much harmonic content to give false peaks on harmonics. Most signal generators do not have output tank circuits, and output is loaded with harmonics.

>

> 2nd question:

>

> Add a bunch of resistance to the output leads (you

> >can experiment to get results), and hang a voltmeter across the coil
>
> This is probably like not being able to see the forest for the trees but
> what is the objective of the resistance so that I would have a clue as to an
> expected range of resistance? It would seem that an attenuator could be
> used. Are we in the range of megohms or what should I be looking for as I am
> adding resistance?
>

The purpose of adding the resistance is to raise the source impedance driving the coil. 100K is the order of magnitude for an IF can. It means that when the coil/cap are off resonance, they essentially "short out" the signal, but when you hit resonance, they become high impedance and voltage jumps up dramatically. Also, 100K or so doesn't load the coil/cap (i.e., lower Q of the entire circuit) so much that the peak isn't fairly sharp and easy to find.

The idea is not "attenuation," it is "impedance matching." Using a resistor means that there is no reactive component in the source----no shift between current and voltage peak in the output. Also, resistors are common bench items, with plenty of them around for the purpose.

I've forgotten what loading a Ballantine 311 or HP 400 meter will put on the circuit. A Tek scope with a 10X probe will put 10 megohms and about 15 pf. across it, which is tolerable, but will shift things some. This and the finite (and still fairly low) source impedance make it difficult to calculate an actual value for Q from the readings. But if you have a set which has symptoms of a sick IF, and there are 6 or 8 tuned circuits, you can find the sick puppies by checking each one out. If the peaks aren't about the same, something is sour. Of course, you have to allow for tapped secondaries, commonly used in communications sets with 2 or more IF's.

What I've described is not identical to the circuits used in the Boonton and Marconi Q meters. You've got both measurement probe loading and source loading involved in this setup. But it will find the resonance peak, and give you some idea of whether it has any Q or not.

--

=====
Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
=====

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996
From: "Lawrence R. Ware" <lrware@pipeline.com>

Subject: Re: Troubleshooting IF Cans??'s

Message-ID: <1.5.4.16.19961216201218.375fbb4c@pop.pipeline.com>

Hi Firebottle fans...

This IF can thread has produced more private e-mail than my free giveaways... :-)

At 23:11 12/15/1996 -0600, morriso@vifp.monash.edu.au wrote:

>Larry Ware mistakenly described it the opposite way as a zero
>impedance voltage source which I'm sure was a "slip of the key" on >his part.

Alas, Morris (and lots of other people :-)) fell victim to my *poor* writing skills... Hank Van Cleef pointed out in private mail how unclear on the concept my post was... :-(
Nice guy that he is, he said nothing publicly. :-)

What I was trying to point out was the need for a series resistor of about the expected impedance of the IF can primary in order to get a clear peak in the output signal. Instead, I wandered off into the discription often used in SPICE models for AC voltage sources... in a SPICE model any signal source is modeled as a zero point impedance voltage source in series with a resistor of it's characteristic impedance. It's done this way because: It's just done this way... :-)

I did not make clear that the device under test (DUT), in this case an IF can, sees both the sig. gen. and the resistor (in series) as it's source. The true input of the DUT is not the IF can primary, rather it is at the signal source end of a resistance equal in value to the characteristic impedance of the DUT.

(Hank will be happy to tell me that I'm still unclear on the concepts, but thats how I learn new things... :-)
Private e-mail from Hank has the highest S/N ratio I've ever seen on this end, but I'm sure glad I was never on the receiving end of one of his design reviews. <grin>

Several people pointed out that the *idea* here was to test an IF can, *not* model the darn thing...

OK, I'm going to shut up now and let someone who has a much better understanding of the issues finish this thread.

-Larry Ware

lrware@pipeline.com# Larry's Home for Wayward Test Equipment & Old Radios (tm)

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lrware@pipeline.com - Orlando, Florida -

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: owens@stout.atd.ucar.edu (Chip Owens)
Subject: TUBE IDENTITY NEEDED
Message-ID: <199612161641.JAA02821@atd.atd.ucar.EDU>

Can anyone help with data on a tube: It is a fairly largish triode with both plate and grid caps. ID on the glass says:

Vacuum Tubes Products Co. 254

My 1952 ARRL handbook shows a HK254 with a 100 watt plate dissipation rating. The plate on this '254 looks to be the same size as one on an Eimac 250TH. So I'm wondering just what this thing is...

Anybody familiar with the: Vacuum Tube Products Company? Does anyone have a data sheet for this particular tube?

Thanks
Chip Owens, NW00

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: "Jim Berry" <basalop@eskimo.com>
Subject: Tubes For Sale
Message-ID: <199612160956.BAA22774@mail.eskimo.com>

Hello Toob Dudes,

Here is one I spotten on HAM packet radio. Please, someone out there get in touch with these fellas and buy these tubes. Remember, get hold of them and not me.

73 Jim

>From : VE5SF
To : SALE @CANADA
Date/time : 14-Dec 01:08

Title : TUBES FOR SALE
From: VE5SF@VE5RRG.#SCSK.SK.CAN.NA
To : SALE@CANADA

The Regina Amatuer Radio Association has received a donation of new and used tubes and insulators and is offering them for sale. Funds

obtained from the sale of these items will be used for club related projects and activities. Anyone interested in any of these materials should contact Sam - VE5SF either by telephone (306)789-7866 between 7:00pm and 10:00pm(01:00 UTC to 04:00 UTC) or via packet VE5SF@VE5RRG.#SCSK.SK.CAN.NOAM

id	qty	condx
0A3 Regulator	1	new
12AT7WC	10	new
12BY7A (12BV7 or 12D7)	5	used
1N1239	5	new
2050W	5	new
3B28	5	new
4B32	45	mixed
5670WA	1	used
5687	1	used
5750	7	new
5894 (same as C178A)	2	new
5933WA	4	new
5Y3WGTA	9	new
6146B	2	used
6189W	26	new
6005W	10	new
6360A	16	mixed
6AH6	2	used
6AL5	2	used
6AU6WC same as 6AU6	9	new
6BQ5	2	new
6C4WA	12	new
6H6	2	new
6H6WGT	5	new
6JM6	2	new
7737	1	used
807	3	new
828	4 used &	3 new
CE94067 (rectifier)	1	new
Insulator 12" ceramic	8	new
Insulator 12" x 1" x 1.25"	3	used
Insulator 8" metal & porc.	7	new
0C3W	10	new

Jim Berry K7SLI. QTH: Marysville, Wa (Near Seattle)
 Email: basalop@eskimo.com FAX: 360-659-1360
 Ham Digital: K7SLI @ K7SLI.#NWWA.WA.USA.NA
 Snail Mail: 5318 142nd PL NE Marysville, Wa 98271

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: BEN NOCK <106312.1035@compuserve.com>
Subject: UK Radio manuals just in
Message-ID: <199612161436_MC1-D32-1550@compuserve.com>

In addition to many other British Mil gear h/books...
just in and therefore first generation copies
offered on the following:

WS19 WORKING INSTRUCTIONS	6.00
A13 RADIO USER HANDBOOK	6.00
A14 RADIO USER HANDBOOK	6.00
A41 RADIO USER HANDBOOK	5.00
C45/HP19 VEHICLE INSTALLATION	6.00
C45 USER HANDBOOK	6.00

prices in sterling, postage extra

I also have a few vehicle manuals, mainly
British, send for list.

Ben G4BXD
MILITARY WIRELESS IN THE MIDLANDS

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996
From: Ho4bart@aol.com
Subject: what would be the simplest ham xcvr ever manufactured?
Message-ID: <961216050252_941761763@emout09.mail.aol.com>

what would be your candidate for the simplest ham transceiver ever
manufactured?
hue miller
yes of course i mean using bulbous technology (Temporarily Useful Bottled
Expedient)

From boatanchors@theporch.com Mon Dec 16 16:17:16 1996
From: km1h@juno.com
Subject: Re: what would be the simplest ham xcvr ever manufactured?
Message-ID: <19961216.121301.7311.5.km1h@juno.com>

The Abbott Labs single tube VHF xcvr would be right up there I think;
dont 'member the model # tho and it may also have been produced under

another name.

A single #19 dual triode?? Someone refresh my memory.....Carl

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996

From: rwayne@ctc.net

Subject: WTD: Millen Info

Message-ID: <32B58229.2232@ctc.net>

I need schematic and any other available information for the Millen modulation monitor model 90903. This unit is rack mounted and has a small CRT.

I will reimburse for costs, time, expenses. etc..

Thanks.

Richard W4LN

rwayne@ctc.net

From boatanchors@theporch.com Mon Dec 16 21:15:31 1996

From: MODSTEPH@ACS.EKU.EDU

Subject: Re: WX3MAS Classic CW Station Dec 15 and CW problem

Message-ID: <01ID33H6FJAE00M6U4@ACS.EKU.EDU>

..am curious as to how this came out. I was fired up and ready to go on CW to work the station, but skip wasn't right. I did hear several others farther west apparently working WX3MAS - hope that the turn-out was good enough to send a message, so to speak...

73, Al N5AIT
modsteph@acs.eku.edu
Allan Stephens
Richmond, Kentucky

LOOKING FOR: SX-146, SX-112, HT-46

From boatanchors@theporch.com Mon Dec 16 09:27:48 1996

From: marty@aa4rm.radio.org (locale for Marty Reynolds)

Subject: Yuletide Dynamotor Recycling Project

Message-ID: <199612161332.IAA05469@aa4rm>

Problem: Operate string of Christmas lights on a 50s flivver for a road run

Solution:

Best would have been a 12Vcd - 110 Vac inverter. No one in my circle of contacts had an example.

Time drawing near

IDEA! Would an ARC5 RX dyno @ 14V put out 110V instead of 220 with 24V in? Well yes, but under light-string load, 50V. Well then how about 2 dynos? 90V under load was answer.

So I was gentle & cleaned bursh-guides & re-lubed the bearings with silicon grease. Even cleaneed 'em with soap & a toothbrush. Total time for daliance about 90 min.

The dynos whirred pleasantly for hours 'til the expected happened. A curious dynamotor viewer slammed a christmas light in the l rear door.

Merry Christmas to all and to all a good day!

Marty